

Atty. Docket No. OPP031052US
Serial No: 10/728,699

Amendments to the Drawings

FIGS. 1A-1B have been amended as required by the Examiner (see page 2, section 2 of the Office Action dated December 21, 2004).

Support for the Amendments

Support for the present amendments can be found throughout the specification, claims and figures as originally filed. Without being limited to such exemplary passages and/or other disclosures, support for the amendment to claim 1 can be found in claims 7 and 9 as originally filed and in the specification on page 11, lines 9-11, and page 14, lines 3-5; support for the amendment to claim 7 can be found in the specification on page 11, lines 5-8, and page 13, line 19 through page 14, line 2; and support for new claim 21 can be found in claim 14 as originally filed and in the specification on page 6, lines 9-10. Support for the amendments to the remaining claims can be found in the context of the claims as originally filed. Thus, no new matter is introduced by the present Amendment.

Remarks

Applicant thanks Examiner Vu for the courteous and helpful discussion held with the undersigned practitioner on February 10, 2005. The Examiner's suggestion to amend the claims to recite the allowable subject matter of claim 9 has been given serious consideration, and the above amendments have been made in accordance therewith. The following remarks shall further summarize and expand upon topics discussed.

The present invention relates to a method of forming a trench in a semiconductor device. The method as set forth in amended Claim 1 above (corresponding substantially to original claim 9) generally forms a sacrificial layer on a silicon wafer and selectively etches the sacrificial layer to form a LOCOS opening having a predetermined width; thermally oxidizes a portion of the silicon wafer exposed through the LOCOS opening to form a LOCOS oxide layer; etches the LOCOS oxide layer and the silicon wafer to a desired depth to form a trench, such that the LOCOS oxide layer is left remaining on the silicon wafer at an area corresponding to edges of the trench; removes the remaining region of the LOCOS oxide layer and forms a liner oxide

layer in the trench; and forms an insulation layer such that the trench is filled with a material of the insulation layer.

The Objection to the Drawings

The objection to the drawings (specifically, FIGS. 1A-1B) has been obviated by appropriate amendment.

The Rejections of the Claims under 35 U.S.C. §§ 102(b), 102(e), and 103(a)

The rejection of claims 1, 2 and 7 under 35 U.S.C. § 102(b) as being anticipated by Liu et al., the rejection of claims 1, 5, 11, 13 and 14 under 35 U.S.C. § 102(e) as being anticipated by Park, the rejection of claims 3, 4 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Liu et al., and the rejection of claims 6 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Park have been obviated by the above Amendment.


Conclusions

In view of the above amendments and remarks, all bases for objection and rejection are believed to be overcome, and the application is believed to be in condition for allowance. Early notice to that effect is earnestly requested.

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If it is deemed helpful or beneficial to the efficient prosecution of the present application,
the Examiner is invited to contact Applicant's undersigned representative by telephone.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'A. Fortney', with a stylized flourish at the end.

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